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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,553	12/13/2000	Manfred Schingnitz	4797-9	5633

7590 10/02/2003

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EXAMINER	
NGUYEN, NGOC YEN M	

ART UNIT	PAPER NUMBER
1754	

DATE MAILED: 10/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/736,553	SCHINGNITZ ET AL.	
	Examiner	Art Unit	
	Ngoc-Yen M. Nguyen	1754	

-- The MAILING DATE of this communication appears on the cover sh et with the correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabe et al (5,347,068) with Tetsumoto et al (US 2003/0037714) to show inherent state of fact.

Rabe '068 discloses a process for simultaneous disposal of solid and liquid wastes comprising the steps of:

a. gasifying in a fixed bed pressure gasifier a gasification material consisting of 99-30% of brown coal briquettes and 1-70% of solid waste material containing at least one member selected from the group consisting of sulfur, hydrocarbons, PCBs (halogen containing material), dioxins and heavy metals, to form a fixed bed pressure gasification crude gas;

b. post-gasifying in a post-gasifier at temperature greater than 1000°C the crude gas from step a) together with an oxygen-containing gas and a liquid waste portion having a heat content of greater than 20,000 kJ/kg (= 20 MJ/kg) and containing at least one member selected from the group consisting of hydrocarbon, PCBs and heavy metals to form a disposal gas;

c. cooling said disposal gas to less than 200°C and quenching to form a soot water and

d. gasifying in a flow gasifier said soot water together with at least one pollutant slurry (note claim 1).

As disclosed in the example, the conversion of the hydrocarbons of the crude gas of the fixed bed pressure gasifier and the waste oil is performed by direct contact with the flame of the burner, by radiated heat and by contact with a hot inner casing of the post-gasifier (note column 6, lines 46-51).

The difference is Rabe '068 does not disclose specifically the step of absorbing at least one of solid components, liquid components and gaseous components of the crude gas with using water.

However, in Rabe '068, it is disclosed that cleaned gas flow 15 can be cooled by quenching liquid flow, optionally, with an intermediate waste heat recovery. The condensate is collected . Since the gas is quenched with water, at least some of the solid or gaseous component in the gas would be absorbed by the quench water.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson et al (5,866,091).

Stevenson '091 discloses a method for minimizing hydrogen halide corrosion in an operating system for the production and purification of synthesis gas (note claim 1). The plastic waste can polyvinylchloride among others. A quench gasifier is used to conduct partial oxidation reactions and to capture most of the acid component of the syngas in the quench water. The partial oxidation reaction is carried out in a free-flow unpacked noncatalytic quench gasifier. The reaction temperature is about 1800-3000°F

(982-1648°C). Under this condition, substantially all halogenated organic materials are rapidly converted into hydrogen halides, carbon dioxide, carbon monoxide, hydrogen and others compounds (note column 2, lines 22-34).

As shown in the Figure, a halogen containing hydrocarbonaceous feedstock and free oxygen containing gas stream are fed to the reaction zone of the gasifier. The feedstock undergoes partial oxidation to form a raw syngas and a slag by-product which passes to quench zone of the gasifier. The syngas and slag are contacted in the quench zone with quench water with quench water containing a neutralizing agent such as ammonia to neutralize the halide content of the gas.

Stevenson '091 does not disclose the heat value of the plastic waste material.

Tetsumoto '714 teaches that the chlorine containing waste contained a vinyl chloride resin, and waste plastic having a heat value of about 20-30 MJ/kg (note paragraph [0109].

The difference is Stevenson '091 does not that the reaction is carried using a flame reaction.

In Stevenson '091, the reaction is required a high temperature. Thus, heat must be supplied in order to obtain the required high temperature. It is well known in the art that heat can be supplied either directly or indirectly. In this case, it would have been obvious to one of ordinary skill in the art to use direct heating by the combustion of the waste material because by doing such, less fuel is required to achieve the required high temperature.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (703) 308-2536. The examiner can normally be reached on Part time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (703) 308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Ngoc-Yen M. Nguyen
Primary Examiner
Art Unit 1754

nmn
10/2/03